4920 SUPPORT EQUIPMENT COMMODITY COUNCIL PATHFINDER

4920 FSC
Industry Day

27 January 2004

4920 SUPPORT EQUIPMENT COMMODITY COUNCIL PATHFINDER

4920 FSC Industry Day Opening/Admin Remarks

Tori Martens
IM Support

27 January 2004

Administrative Information

- No food or drink allowed in theater/conference facility
- Turn off cell phones and beepers
- Locations:
  - Restrooms (location)
  - Breakout Sessions (location)
  - Lunch – off site – locations

Administrative Information

- $25 Conference Fee covers handouts, beverages, pastries, and conference facility
- Appointments for individual sessions on 28 Jan 04 may be arranged at the conference registration desk
- Appointment Request
- Action Item Form
- Feedback Form

Appointment Request

REQUEST FOR INDIVIDUAL APPPOINTMENT, 28 Jan 04

Complete this form and turn it in at the registration desk NLT 1500 27 Jan 04 and they will set up an appointment at that time.

Topics for Discussion:

_____

Appt Time:_____

***************************For Commodity Council Use*****************************

Attendee to be invited:

_____

Action Item Sheet

FSC 4920 Commodity Council
Industry Day
27 January 2004

ACTION ITEM FORM

INITIATOR: Name: _____

Organization: _____

Address: _____

_____

_____

E-Mail: _____

Phone: _____

ACTION: Provide as much detail as necessary and be specific in your request for information. This section can be used for questions, points to consider, or issues to be addressed by the community:

_____

_____

_____

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**********For Commodity Council Use**********

ASSIGNED TO: _____

PROJECTED DATE FOR CLOSURE: _____

Agenda

- 0800-0810 Opening/Administrative Remarks

  0810-0825 Welcome

  Mr. Blair, Director of Logistics Management, WR-ALC/LG

  Mr. Koenig, Deputy Director for Supply Management, HQ AFMC/LG

  0825-0920 Commodity Council Briefing/Introduction

  0920-0940 Analysis to Date

  0940-1000 Break

  1000-1030 Partnering Opportunities

  1030-1050 Market Research Analysis

  1050-1100 Breakout Session Definitions

  1100-1110 Wrap Up – Morning Session

  1110-1210 Lunch

  1210-1650 Breakout Sessions (schedule on next slide)

Agenda (Continued)

- **1210-1700 Break-out Sessions**
  - -1210-1300 Electronics/Auto Test Sys Theater
    Machining/Fabrication/Test Stands Breakout Room
  - -1310-1400 Test Equipment Theater
    Optical/Optics Breakout Room
  - -1410-1500 Engine Test Theater
    Cabling/Harnessing Breakout Room
  - -1510-1600 Fuel Test Theater
    Electro-Mechanical Breakout Room
  - -1610-1700 Hydraulics/Pneumatics/Pressure Theater

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4920 FSC
Industry Day
Rita Blair
Team Lead

27 January 2004

"There is no Air Power without Support Equipment"

Overview

- Background
- Commodity Council
- Pathfinder Efforts
- Team Members
- Initial Evaluation
- Progress to Date
- Key Discoveries
- Goals

Background

- **Part of SAF/IL Spares Campaign and implementation of Purchasing & Supply Chain Management initiative**
- **AF/IL Expectations**
  - **Stand-up all Commodity Councils by end of FY04**
  - **100% commodity strategies by end of FY05**
- **AF/IL Goals**
  - **50% decrease in total cycle time**
  - **20% supply material availability improvement by FY06**
  - **20% decrease in material purchase & repair costs in FY04 – FY09**

Background

- Each Air Logistics Center responsible for a Proof of Concept Pathfinder Commodity Council
- Selection Criteria
  - Crosses Product Directorates/Centers
  - Mix of buy and organic/contract repair
  - Competitive and sole source
  - Supportability issues

Pathfinder Commodity Councils

COMMODITY COUNCIL:
4920 Support Equipment

FSC GROUP: **4920**

LEAD: **WR (with OC/OO membership)**

Total SPEND: **$118M**

Crosses Multiple ALCs and Product Directorates

COMMODITY COUNCIL:
Miscellaneous Aircraft (gear boxes, actuators, accumulators)

FSC GROUP: **1680**

LEAD: **OC (with WR/ OO membership)**

Total SPEND: **$164M**

Crosses Multiple ALCs

COMMODITY COUNCIL:
AC Landing Gear Components / AC Wheel & Brake Systems / AC Tires & Tubes, Pneumatic

FSC GROUP: **1620 /1630 / 2620**

LEAD: **OO-ALC**

SPEND 1620:	***SPEND 1630:***	***SPEND 2620:***
Total = $163M	**Total $80.5M**	**Total $45.7M**

Stable team –
Moving from item to commodity strategy

Commodity Council

- **A Cross-Functional Group that Formulates AF-Wide Commodity/Supplier Strategies**
  - **Executed Locally (ALC)**
- **Objectives**
  - **Eliminate Duplication of Contracts**
  - **Minimize Costs**
  - **Leverage Spend**
  - **Develop Supplier Relationships**

4920 Team Members

CORE: **Rita Blair, Supvr Contract Spec – Team Lead**

Tracy Elliott, Program Manager

Joe Howard, Engineer

Denise Hardy, Resource Management

Tammy Parkerson, Contracting Officer

Tori Martens, Item Management

Frank Rivera, Contract Specialist

Facilitators/Coaches – Janice Gillen, Contr Spec

Dr. Tom Depaoli, IBM

Dedicated full-time team formed 19 Sep 03

Extended Team

- **17 Extended Team Members from the following areas:**
  - **Small Business**
  - **Transportation**
  - **Change Management**
  - **Supply Analyst**
  - **Strategic Alliance Group**
  - **Contracts Policy & Procedures**
  - **Acquisition Excellence**
  - **Depot Maintenance**
  - **Logistics Management**
  - **Price Analyst**
  - **DCAA/DCMA**
  - **Legal**

Initial Evaluation Process

- Initial population of 46,403 – DLA/Navy/Army = 27,116
- Less Acquisition Advice Code V (terminal items- no future procurement), Code Y (non-stocked items), and Code X (no replacement) items = 16,007
- Less items that are not active (no buy/repair or forecast) = 1645
- Adjusted from Mar 03 comp = 1,691

FSC 4920 Characteristics

– Examples of Support Equipment are as follows:

ACCESSORY KIT	FIXTURE SET, AIRCRAFT	TABLE, TILTING, GYRO
CABLE ASSEMBLY	FIXTURE, ENGINE	MODULE ASSEMBLY
CALIBRATION SET	FIXTURE, FUEL SYSTEM	MONITOR, PHASE
CIRCUIT CARD ASSEMBLY	HEATER, ENGINE	MOTOR ASSEMBLY
COMPUTER SYSTEM	MAINTENANCE KIT	NOISE SUPPRESSOR
CONTROL PANEL, TEST	MODULE ASSEMBLY	PLUG-IN UNIT
COUPLER, TEST SET	PLUG-IN UNIT	REPAIR KIT
DIGITAL TEST UNIT	REPAIR KIT, AIRCRAFT	SHIELD, BLAST
DOLLY	SHIELD, GRIT BLAST	SIGNAL CONDITIONER
DYNOMOMETER	SIGNAL CONDITIONER	SIMULATOR
ELECTRONIC COMPONENTS	SIMULATOR	TEST KIT
EXTENDER BOARD SET	STAND, MAINTENANCE	TEST PROGRAM SET

BACKGROUND: 4920

- Major Issues
  - Obsolescence
    - 1970/1980s Technology
    - Diminishing sources of supply
  - Historically inadequate funding
  - Decentralized funding

Progress to Date

- Spend analysis complete
  - Information pulled from 18 data bases
  - 75 days for completion (5,400 man hours)
  - Encompasses
    - ALT/PLT/Customer Wait Time
    - Back Orders/MICAPs
    - Customers
    - Contractors/Current Contracts and History
    - Customer Survey/Market Survey/Industry Day
    - Past Performance
    - MMAC/Weapon System

Progress to Date

- Evaluate/Assess current market
- Analyze forecast future demands
  - Reviewing historical consumption and forecast demands
  - Analyzing projected funding and impact of decentralization
- Create future strategy
  - Develop metrics and performance collection process
  - Synchronize demand with supplier capability
  - Prepare action plan to achieve new strategy
  - Develop risk mitigation plan
  - Develop key supplier relationships
  - Identify existing contractual vehicles
  - Present plan for approval by Apr 04

Key Discoveries

- 80% of the spend is non-competitive
- 59% of the dollars is for Ground Support Equipment
- Quantities of less than 10 make-up 49% of buy and 31% of repair dollars
- FY04-06 forecast shows a 78% increase in dollars – but there are funding constraints
- 11 technology or family groupings exist that may require specifically tailored strategies

Implementation of Strategy

- **Strategy approval**
  - **Group of Eight**
- **Upon approval**
  - **Implementation strategy may not be worked by this team**
  - **Develop solicitations, terms and conditions, evaluation criteria, incentives**
  - **Work with sole source vendors to develop contracts**
    - **IPT pricing**
    - **Joint development of SOW/SOO**
  - **Pursue competitive actions with as much contractor participation as possible**

Considerations for Strategic Contracts

- Performance-based
- Incentives for performance
  - Handling obsolescence issues
  - Handling diminishing sources of supply
  - Reliability improvement
  - Reduced delivery times
  - Improved backorder age/rates
  - Repair turn around time

Goals

- How can we better do business with you, and provide better support to the war fighter?
  - By Building Supplier Relationships
  - Sharing information/working as a team
  - Reduce Administrative and Production Lead Times
  - Reduce the amount of paperwork
  - Reduce MICAPs and Backorders and improve Customer Wait Time
  - Overcome obsolescence issues and diminishing sources of supply
  - Grouping Equipment by Technologies or some other logical arrangement
- Bottom line – provide required support to the warfighter in both peacetime and wartime which is cost effective and in the best interest of both the Government and the contractor

4920 SUPPORT EQUIPMENT COMMODITY COUNCIL PATHFINDER

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4920 FSC Industry Day

Tracy K. Elliott
WR-ALC/LE-PSCM
Program Manager

27 January 2004

Today's Objective

- Share with you our key spend findings
  - Who is doing the buying
  - What are we buying
  - How are we buying
  - Whom are we buying for
  - No single AF Strategy
- Highlight areas of concern that this commodity faces
- Gain insight about you, our suppliers
- Solicit your ideas

Spend Analysis Conclusions/Observations

- Covered 1,691 active stock numbers
- 90% of the spend is Warner Robins LE controlled
- 59% of the dollars spent was for Ground Support Equipment
- Contractual in nature for both buy and repair
- Composed of many different contractors both large and small
- Lion Share of the stock numbers were for small quantities for both buy and repair
- Covering a wide range of technologies
- FY 04-06 Forecast shows a 78% increase in dollars

REVIEW CURRENT STRATEGY:

Air Force
FSC 4920 Support Equipment Spend – FY01-FY03

ALC	Total Dollars	Total %
WR-ALC	$159M	87.31%
OO-ALC	$16M	8.58%
OC-ALC	$7M	4.05%
DLA	$0.1M	0.06%
	$182 M	100%

Source: Spend Analysis FY 01 – FY 03

REVIEW CURRENT STRATEGY:

Air Force
FSC 4920 Support Equipment Spend – FY01-FY03

ALC	NEW BUYS	REPAIRS	% Buy	% Rep
WR-ALC	$107M	$53M	83.7%	95.7%
OO-ALC	$13M	$2M	10.4%	4.3%
OC-ALC	$7M	$0	5.8%	0.0%
DLA	$0.1M	$0	0.1%	0.0%
	$127M	$55M	100.0%	100.0%

REVIEW CURRENT STRATEGY:

Air Force
FSC 4920 Support Equipment Spend –

Type	Total Dollars	Total %
Ground Support Equipment	$108M	59%
Non-Automatic Test Equipment	$16M	9%
C-5 Unique Support Equipment	$14M	8%
F-16 Unique Support Equipment	$12M	7%
Airborne Electronic Warfare	$10M	5%
B-1 Unique Support Equipment	$7M	4%
All Other Support Equipment	$15M	8%
	$182M	100%

Source: Spend Analysis FY 01 – FY 03

REVIEW CURRENT STRATEGY:

	Total Dollars	Contract	Organic
New Buys	$127M	100%	0%
Repair	$55M	98.3%	1.7%

Source: Spend Analysis FY 01 – FY 03

REVIEW CURRENT STRATEGY:

Contracts	Competitive	Non-Competitive	Total	% Competitive	% Non-Competitive
New Buys	$34M	$93M	$127M	26.5%	73.5%
Repairs	$4M	$51M	$55M	7.0%	93.0%
Combined	$38M	$144M	$182M	20.7%	79.3%

Source: Spend Analysis Fy01- Fy03

REVIEW CURRENT STRATEGY:

Air Force
FSC 4920 Support Equipment Spend – FY01-FY03

MAJCOM	Total %
Air National Guard (ANG)	22.5%
Air Combat Command (ACC)	19.0%
Air Force Materiel Command (AFMC)	12.8%
Foreign Military Sales (FMS)	9.7%
Air Mobility Command (AMC)	8.5%
Pacific Air Force (PACAF)	7.4%
Air Education & Training Command (AETC)	7.0%
U.S. Air Forces Europe (USAFE)	6.1%
Air Force Reserve Command (AFRC)	3.0%
Other Commands and DoD Agencies	4.0%

Percentages shown is based on qty and not dollars

Source: Spend Analysis FY 01 – FY 03

Support Equipment Challenges

- Limited SE funding
  - SE usually under funded (>20%)
  - Obsolescence and Diminished Source issues are key drivers
  - Reliance on fallout and O&M funding
- Sustainment of old technologies
- Currently only buying replacements and not upgrading existing systems

Summary of Spend Analysis Challenges

- Decentralization
  - Customer will determine needs/priority
  - Customer will provide funding
  - Many items will continue to be centrally managed/procured
  - Strategy is to put centralized contracts in place with decentralized ordering
  - Logistic and engineering functions will still be provided
  - WR-ALC

Goals and Objectives

- How can we improve end-to-end sustainment
- Supportability
  - Reduce MICAPS and backorders
  - Customer Wait Time
- Improve efficiency
  - Reduce lead times in all areas
    - Administrative
    - Production
    - Repair
- Lower costs
  - Man hours
  - Storage and distribution
  - Bit piece parts

Goals and Objectives

- Improve reliability and the life of the systems
- Provide us with your knowledge and expertise on how best to group this diverse profile of technologies.
- We want to hear from you!
- We are looking to build long term customer/supplier relationships that benefit your company, the government, and ultimately the Warfighter.
- We encourage you to ask questions and participate in helping us achieve these goals

Potential Opportunities

Current number of Suppliers	Type	Spend
174	Buy Competitive	4 = 40% 170 = 60%
175	Buy Non-competitive	6 = 53% 169 = 47%
18	Repair Competitive	6 = 80% 12 = 20%
38	Repair Non-competitive	6 = 87% 32 = 13%

You hold the key to the future

4920 SUPPORT EQUIPMENT COMMODITY COUNCIL PATHFINDER

There is no Air Power without Support Equipment

Avionics & Instruments Division
Robins AFB GA

WR-ALC/MAI

Organization

Avionics & Instruments Division
MAI
Col. Timothy Ryan
Mr. Greg Stanley

- **Precision / Radar / Gyro**
  MAIB
  Daniel Mihelarakis
- **Support Equip / Comm-Nav / EW**
  MAIE
  Bruce Capehart
- **F-15**
  MAIF
  Jimmy Beeland
- **Calibration & Manufacturing**
  MAIL
  Bill Best
- **Process Control & Improvement**
  MAIP
  Bob Zwitch
- **Quality Assurance**
  MAIQ
  James Braswell
- **Resource Management**
  MAIW
  Barbara Cross

Supported Systems

- Technology span covers 1950's through 1990's technologies under one roof

- Antennas and Radomes
- Cockpit Instruments
- Gyros
- Electronic Warfare
- HF,UHF, VHF Radios
- LANTIRN
- Computers & Peripherals
- Radar: Navigational, Terrain Following, Search, Attack, Fire Control,
- Infrared Scanners
- Precision Measurement Equipment
- LASER Designators
- Optical Systems
- Throttle Quadrants
- Video / Data Recorders
- Global Positioning System
- Instrument Landing Systems
- TACAN
- Transponders
- Heads-Up Display
- JTIDS
- LORAN Receivers
- Radio Beacons
- RADAR Altimeters
- Lead Computing Sights
- Test Equipment

Employees

- 1392 certified electronic mechanics, technicians, engineers, and support personnel
- 25 military: 2 officer and 23 enlisted
- Approximately 1/3 of mechanics/ technicians have technical degrees, many others have prior military service in avionics repair

Facility

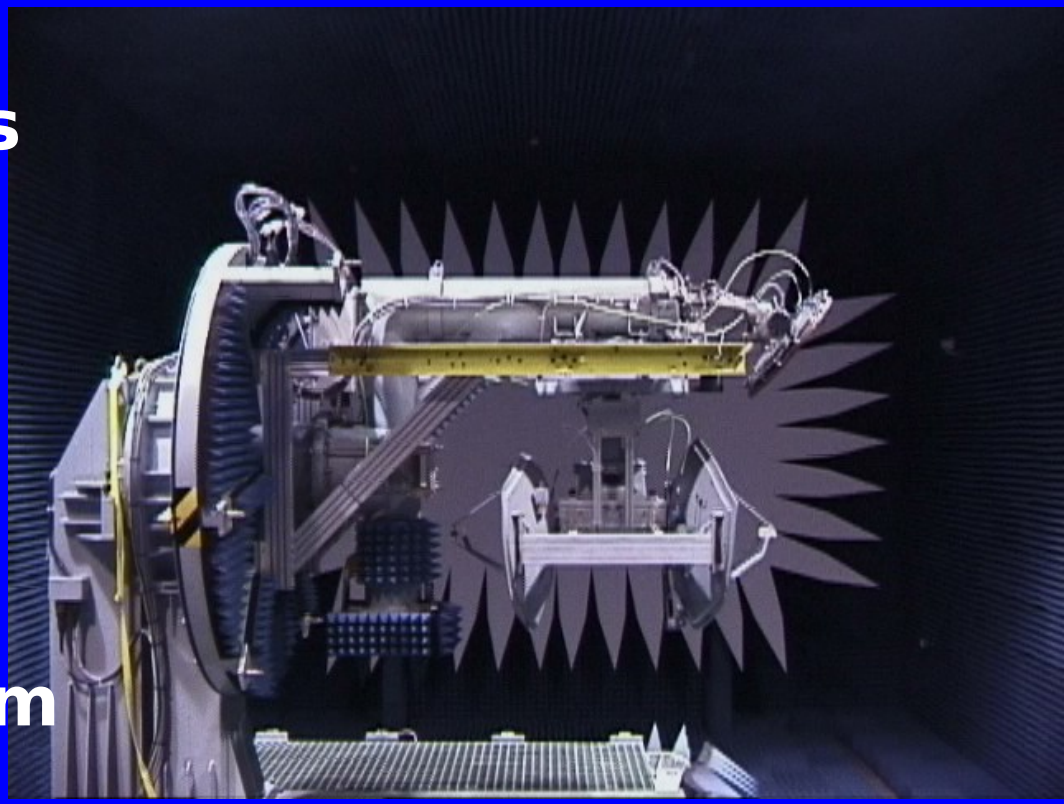
- 16+ acre complex
- 700,000 SF of environmentally-controlled, secure work area
- Eight safe firing LASER rooms
- 17,000 SF of clean rooms
  - Class 10,000 to 300,000
- Standard, flexible electrical wireways
- 80,000 SF of raised floor

Business of Production

- 66 separate work centers producing over 90,000 units in FY03, 81,000 units in FY02
- Revenue:
  - FY03: $397M
  - FY04: $457M (budgeted)
- SURGE: 26,841 units (9/11/01 to Dec 03)
- Quick response to the war fighter
- Low density, fluctuating requirements, obsolete technology

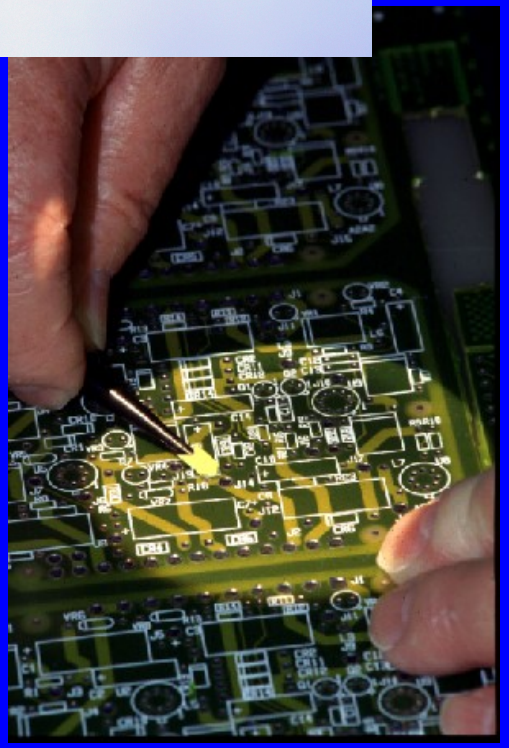
Unique Capabilities

- 7 indoor ranges
- 3 outdoor ranges
- 2 anechoic chambers
- F-15 PRISM
- Radome Accuracy Verification System
  - Combat Talon II radome



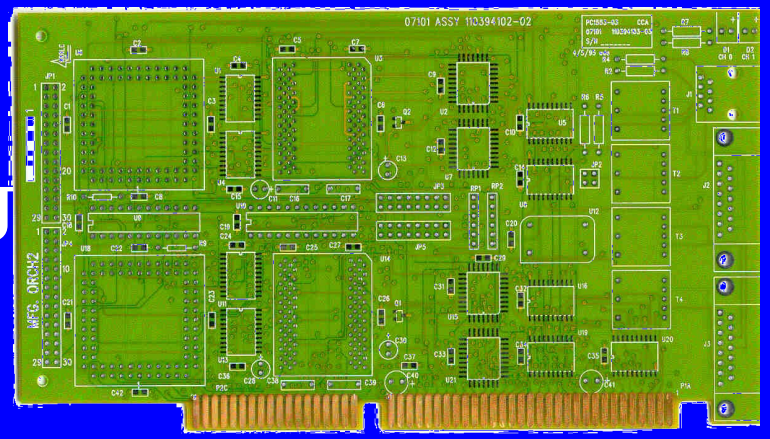
Organic Manufacturing

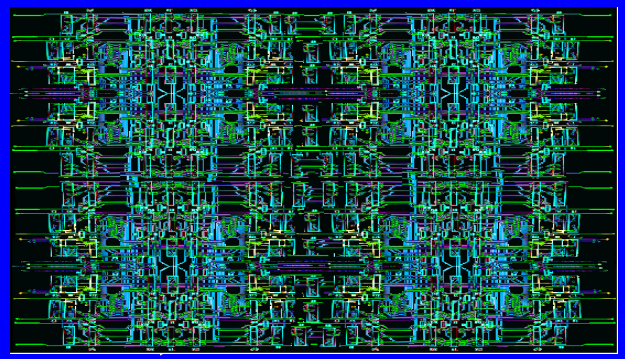
- Low volume
- Quick turnaround
- Minimum cost
- High quality
- Build-to-print

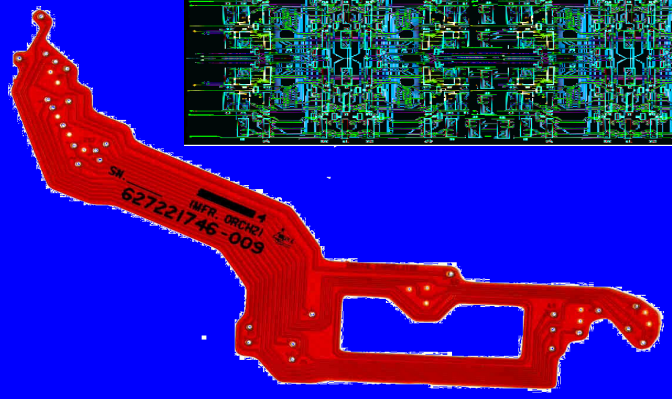


Printed Wiring Board Shop

- **Capabilities:**
  - **Design**
  - **reverse engineering**
  - **Build-to-print**
  - **Fabrication**
  - **Single/double-sided boards**
  - **Multi-layer (22) boards**
  - **4 mil runs / 4 mil spaces**
  - **Flexible / rigid-flexible**

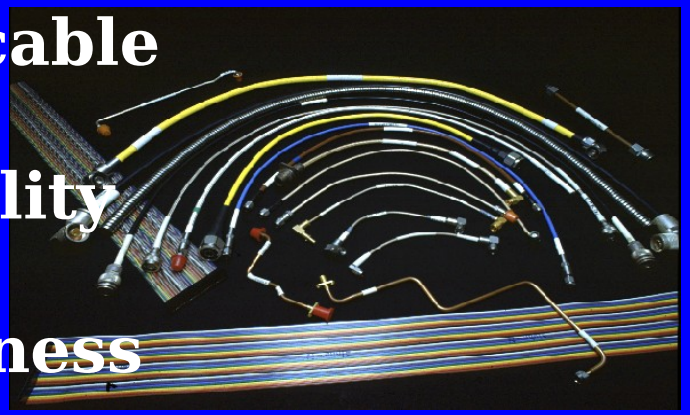


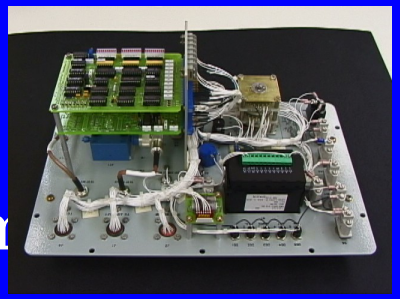




Cable Shop

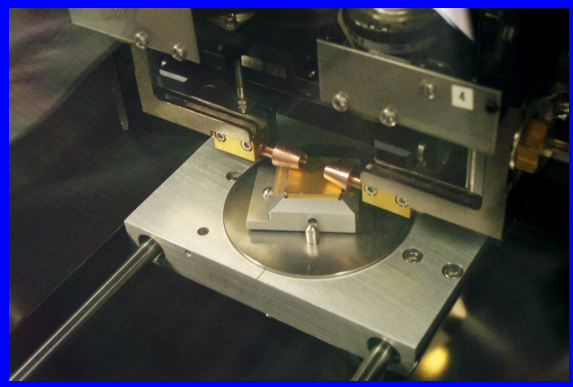
- High frequency semi-rigid cable
- RF Coaxial cable
- Reverse engineering capability
- Ribbon and coaxial cable
- Multi-conductor wiring harness
- Interface test adapters
- Small test sets to flightline test sets
- Repair capability (LANTIRN Center Section)
- Testing
  - Flexible Automatic Circuit Tester FACT
  - HP8510 network analyzer system





Hybrid Micro-Electronic Shop

- Form - fit - function designs
- Custom designs using off-the-shelf components
- Organic thick film substrate manufacturing
  - Single and multi-layer substrates
  - Est capacity 6000 substrat per year
- Hybrid microcircuit assembly an test
  - Thick and thin film circuits
  - Estimated capacity 2300 hybrid circuits per year
- Quality conformance testing
- Limited repair capability



LANTIRN Partnership
Lockheed Martin

- **Phase I**
  - **Long term repair contract**
  - **Outgrant Lease**
    - **Lockheed repair relocated to Robins AFB**
  - **Benefits**
    - **Improved repair times**
    - **Flexible repair capability on critical items**
    - **Basis for Phase II implementation**

JSTARS Partnership
Northrop Grumman

- Hybrid Government furnished supplies & services (GFSS)
- 152 Shop Replaceable Units (SRUs) on contract
- Implemented Dec 2000
- 27 day average turn time against 30 day contract requirement

Pending Partnerships

- AN/AAQ-33, Sniper Targeting Pod
  - Lockheed Martin Missiles & Fire Control – Orlando
  - Standup FY06
  - Estimated workload 205 hours (168 pods)
- AN/APN-241, Color Weather Radar
  - Northrop Grumman
  - Standup FY05
  - Estimated workload 120 repairs/yr, 2400 hrs
- C-17 Avionics
  - Boeing, Direct Sales Agreement
  - Standup FY04
  - Estimated workload 2800 hrs

Pending Partnerships, (cont.)

- F-15 HUD & MPD
  - Kaiser Electronics (TBD: GFSS or DSA)
  - Contract award: FY 06
  - Benefit: increased parts availability
- F-15 Digital Map Set
  - Honeywell (DSA)
  - Standup – FY 04
  - Benefit: 50% reduction in depot standup costs
- F-15 ESTS
  - Northrop Grumman (GFSS)
  - Standup – FY06
  - Benefit: >50% reduction in depot standup costs

MAI Rocks & Nuggets (cont.)

- Equipment
  - Transformation
    - Move away from large scale ATE
    - Smaller, user programmable testers
- Transformation
  - Develop a niche
  - COE for Repair Plus
    - Partner with Industry to Provide Total Sustainment
    - Eliminate Obsolescence
    - Increase MTBF
    - Reduce TOC

Avionics & Instruments Division

Fixin' For The Fig

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Industry Day

Market Research

Joseph Howard
Engineering Support

27 January 2004

QUESTIONNAIIRE

- **Common points**
  - **Data re petition**
  - **Long-t**
  - **Share t**
  - **Commerc**
  - **Identify entr evelopment**
  - **Funding and**

ISSUES

- Data required to determine competition
  - The commodity council, understands the need for data to develop sources.
  - During market research data is being identified.
  - Data availability is being evaluated.

ISSUES

- Use Long-term contracts
  - Contract Objectives
    - Requirements that meet user needs
    - Provide adequate incentives for industry
    - Allow flexibility for pricing, and delivery
    - Include buy, repair and engineering services
    - Technology Insertion
    - Diminishing manufacturing sources
    - Obsolescence
  - Consider risk mitigation
  - Fixed price contracts will be used to the maximum extent possible

ISSUES

- **Forecasting**
  - **Air Force best estimate**
  - **Provide available data**
  - **Consider low quantity-low dollar items**

ISSUES

- **Commercial solutions**
  - **Employ e-commerce**
  - **Develop direct input from customer to contractor**
  - **To the maximum extent possible:**
    - **Use commercial packaging/packing/marking**
    - **Use proven commercial practices**
  - **Performance Based Specification for Commercial-Off-The-Shelf products**

ISSUES

- **Provide Entry Points for Dual Business Development**
  - **The commodity council is here to help with the 4920 business area**
  - **Industry must also provide corporate contacts**

ISSUES

- **Funding and Cash Flow**
  - **Review payment requirements**
  - **Improve payment documents (DD 250's, invoices, vouchers)**
  - **Invoicing accurate**

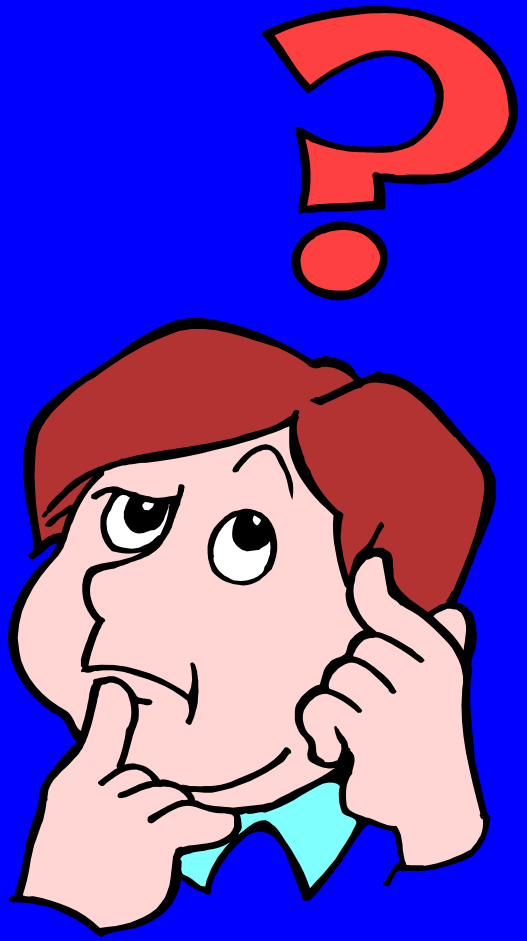
LIMITATIONS

- Public law
- Federal Acquisition Regulations
- Policies, processes and procedures
- Warfighter priorities and funding

WE CAN

- Manage change for mutual benefit
- Identify processes/policies/procedures requiring change and propose alternatives
- Maintain open communication and build cooperative agreements
- Challenge the “business as usual” concept

Questions



THE
END

4920 SUPPORT EQUIPMENT COMMODITY COUNCIL PATHFINDER

4920 FSC Industry Day Wrap-Up Morning Session

Rita Blair
Team Lead

27 January 2004

Goals

- How can we improve end-to-end sustainability?
- How can we lower costs?
- Teamwork with industry is paramount
  - Building supplier relationships
  - Sharing information/working as a team
- Focus on continuous improvement on both sides – industry and government
- We are looking to build long term customer/supplier relationships that benefit your company, the government, and ultimately the warfighter.
- We encourage you to ask questions and participate in helping us achieve these goals

Breakout Sessions

- Schedule in your packet
- Times: 1210-1700
- We encourage your active participation to be sure that we achieve maximum benefit from the time we have together
- Individual appointments – registration desk before 3:00 pm
- Thank you for your attendance and participation

4920 SUPPORT EQUIPMENT COMMODITY COUNCIL PATHFINDER

Bye